Please make the following changes to the Abstract:

ABSTRACT

The invention concerns a device comprising including at least a plurality of ionizing corona-effect electrostatic precipitators including emissive and collecting electrodes. The number of electrostatic precipitators is defined on the basis of a flux to be treated, considering that the slower the passage, the more efficient the collection is, and the less the electrodes converted into resistors are cooled by the flux. The collecting electrodes, which are smooth and tubular, are alternately collectors and electric resistor, and therefor they are heated over short periods, at a temperature sufficient for incinerating or burning the collected particles. The emissive electrodes are centered in the collecting structures. SaidThe electrodes are axial relative to the direction of the passage of the flux to be treated in the collecting electrodes and can be complementary to other electrodes in the form of beams perpendicular to the direction of the flux, gases and mists to be treated. devices can be associated therewith, such as oxidation catalysts, pre-filters, after filters or other devices enabling reduction of gaseous, solid and liquid pollutants and noise attenuation. The inventive device is designed, but exclusively, for filtering and regenerating engine exhaust gases, oil and water mists, fumes, intake air, extraction or recycling, and generally all pollutants harmful the environment.